Amendments to the Specification

Page 25, please replace the paragraph spanning line 7 through page 26, line 29, with the following rewritten paragraph:

It was confirmed that, in a same manner as in Example 7, an anti-adduct and a syn-adduct were obtained from an E-body and a Z-body at high diastereoselectivity and high enantioselectivity, respectively.

Table 6

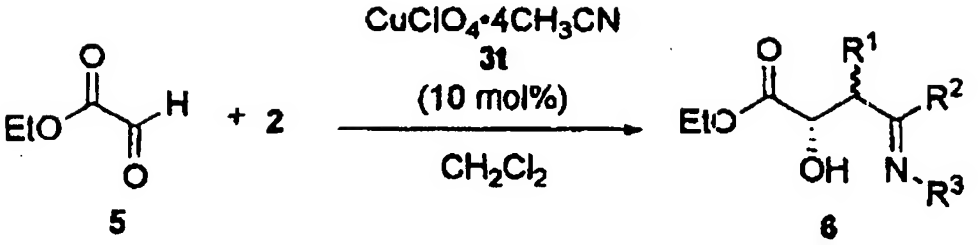
No.	R^2	R^3	R^4·R^5	Yield (%)	Syn/anti	ee (%)
8-1	BnO	Ph	Et, H (E)	90	1/99	98
8-2	BnO	Ph	H, Et (Z)	92	99/1	98
8-3	BnO	Et	Me, H (E)	~~83~~ 89	~~3/97~~ 8/92	~~97~~ 98
8-4	BnO	Et	H, Me (Z)	~~89~~ 83	~~92/8~~ 97/3	~~98~~ 97

(2*S*)-3-Benzoyl-2-hydroxy-pentanoic acid ethyl ester (*syn/anti* mixture): ^{1}H NMR *syn* ($CDCl_3$) δ = 0.93 (t, 3H, *J* = 7.5 Hz), 1.19 (t, 3H, *J* = 7.1 Hz), 1.70-2.05 (m, 2H), 3.18 (brs, 1H), 3.83 (dt, 1H, *J* = 5.3, 8.3 Hz), 4.19 (q, 2H, *J* = 7.1 Hz), 4.51 (d, 1H, *J* = 5.3 Hz), 7.42-7.54 (m, 2H), 7.54-7.62 (m, 1H), 7.90-8.02 (m, 2H); *anti* ($CDCl_3$) δ = 1.04 (t, 3H, *J* = 7.6 Hz), 1.15 (t, 3H, *J* = 7.1 Hz), 1.80-1.95 (m, 2H), 3.70 (d, 1H, *J* = 9.5 Hz), 3.83 (dt, 1H, *J* = 4.2, 7.1 Hz), 4.09 (q, 2H, *J* = 7.1 Hz), 4.43 (dd, 1H, *J* = 4.2, 9.5 Hz), 7.46-7.52 (m, 2H), 7.56-7.63 (m, 1H), 7.88-7.95 (m, 2H); ^{13}C NMR *syn* ($CDCl_3$) δ = 12.0, 13.9, 21.3, 51.2, 61.9, 71.1, 128.3, 128.6, 133.2, 137.0, 173.6, 201.5; *anti* ($CDCl_3$) δ = 12.0, 13.9, 22.3, 50.1, 61.4, 71.3, 128.3, 128.7, 133.5, 136.6, 173.4, 203.9; IR (neat) *syn* 3477, 2972, 2876, 1738, 1675, 1596, 1447, 1372, 1255, 1220, 1118, 1023, 931, 849, 779, 701; *anti* 3485, 3062, 2966, 2941, 2875, 1738, 1682, 1596, 1579, 1448, 1368, 1268, 1208, 1134, 1100, 1028, 914, 849, 785, 699 cm^{-1}; HRMS (FAB); Exact mass calcd for $C_{14}H_{19}O_4$ $[M+H]^+$, 251.1283. Found 251.1277.; HPLC, Daicel Chiralcel AS, hexane/^{i}PrOH = 4/1, flow rate = 0.5 mL/min : t_R = 13.7 min (2*S*, 3*S*), t_R = 15.3 min (2*S*, 3*R*), t_R = 17.6 min (2*R*, 3*R*), t_R = 23.1 min (2*R*, 3*S*).

(2*S*)-2-Hydroxy-3-methyl-4-oxo-hexanoic acid ethyl ester (*syn/anti* mixture): ^{1}H NMR ~~*syn*~~ *anti* (C_6D_6) δ = 0.89 (t, 3H, J = 7.1 Hz), 0.99 (d, 3H, *J* = 7.2 Hz), 1.97-2.08 (m, 2H), 2.70 (dq, 1H, *J* = 4.9, 7.2 Hz), 3.39 (d, 1H, *J* = 6.7 Hz), 3.80-4.00 (m, 2H), 4.11 (dd, 1H, *J* = 4.9, 6.7 Hz); ~~*anti*~~ *syn* (C_6D_6) δ = 0.87 (t, 3H, *J* = 7.1 Hz), 0.93 (t, 3H, *J* = 7.3 Hz), 1.02 (d, 3H, *J* = 7.2 Hz), 1.95-2.22 (m, 2H), 2.65 (dq, 1H, *J* = 4.4, 7.2 Hz), 3.05-3.23 (m, 1H), 3.80-4.00 (m, 2H), 4.38-4.47 (m, 1H); ^{13}C NMR ~~*syn*~~ *anti* (~~$CDCl_3$~~ C_6D_6) δ = 7.58, 12.8, 14.0, 34.6, 49.4, 61.3, 73.0, 173.5, 211.3; ~~*anti*~~ *syn* (C_6D_6) δ = 7.7, 11.0, 14.0, 34.0, 49.5, 61.6, 71.7, 173.7, 209.9; IR (neat) ~~*syn*~~ *anti* 3484, 2981, 2940, 1739, 1716, 1459, 1409, 1375, 1268, 1209, 1108, 1066, 1025, 975, 862, 808, 748; ~~*anti*~~ *syn* 3488, 2981, 2940, 1733, 1716, 1459, 1373, 1218, 1145, 1025, 977, 862, 800, 752 cm^{-1}; HRMS (FAB); Exact mass calcd for $C_9H_{17}O_4$ $[M+H]^+$, 189.1127. Found 189.1120.;

Page 28, please replace Table 7 with the following rewritten Table 7:

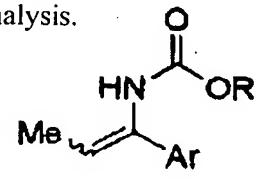
Table 7



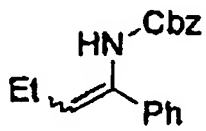
5 6

entry	2	product	yield (%)[a]	syn/anti[b]	ee (%)[c]
1	2f*E*	7f	83	1/99	98
2[d]	2f*E*[e]	7f	93	1/99	97
3[d]	2f*E*[f]	7f	95	1/99	98
4	2f*Z*	7f	82	98/2	98
5	2f*Z*[e]	7f	93	98/2	98
6	2f*Z*[f]	7f	96	98/2	98
7	2g*E*	7g	96	2/98	98
8	2g*Z*	7g	97	98/2	98
9	2h*E*	7g	82	3/97	96
10	2h*Z*	7g	96	99/1	98
11	2i*E*	7i	85	2/98	98
12	2i*Z*	7i	79	99/1	98
13	2j*E*[g]	7j	58	1/99	98
14	2j*Z*	7j	92	99/1	98
15[d]	2k*E*	7k	~~83~~ 89	~~3/97~~[h] 8/92[h]	~~97~~ 98
16[d]	2k*Z*	7k	~~89~~ 83	~~92/8~~[h] 97/3[h]	~~98~~ 97
17	2l	7l	85	16/84[h]	94

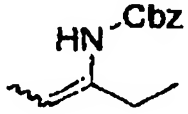
[a] Isolated yield of ketone product. [b] Determined by HPLC. [c] Ee of the major diastereomer, determined by HPLC. [d] –20°C. [e] 1 mol% of catalyst was used. [f] 0.1 mol% of catalyst was used. [g] 1 (1.0 eq.) and 2 (2.0 eq.) were used. [h] Determined by NMR analysis.



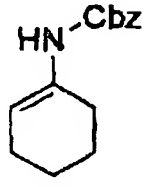
2f: Ar = Ph, R = Bn
2g: Ar = PMP, R = Bn
2h: Ar = PMP, R = Et
2i: Ar = PCP, R = Bn



2j



2k



2l

Page 31, please replace the paragraph spanning lines 10-14 with the following rewritten paragraph:

When a reaction was performed under same conditions as described above except that $Cu(OTf)_2$ was used in place of $Ni(OTf)_2$, hydroxydiketone was obtained at a yield of 52% with an optical purity of 72% ee.